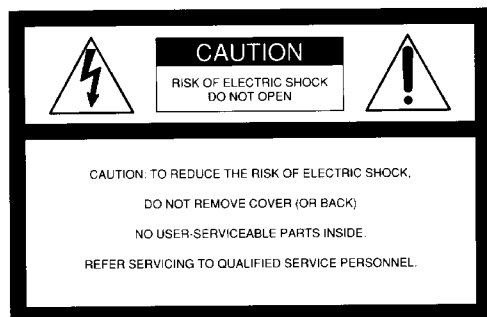# SONY

Stereo
Cassette Deck

Operating Instructions

TC-RX77ES

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

⚡

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

!

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,

DO NOT REMOVE COVER (OR BACK)

NO USER-SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

⚡ This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

! This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

* The graphical symbols are on the rear enclosure.

INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna

Relocate the equipment with respect to the receiver

Move the equipment away from the receiver

Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

Owner's Record

The model and serial numbers are located at the rear. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No.   TC-RX77ES   Serial No. _____

Table of Contents

Features

For higher quality recording/playback
- **The Dolby HX PRO* system** which improves the linearity of the tape's high-range response during recording.
- **B and C type Dolby NR* systems** which reduce tape noise.
- **Bias calibration** to achieve the optimum bias current setting for any tape.

For your convenience
- **Quick reversing** at the end of a tape to minimize interruptions during playback and recording.
- **The AMS and Memory Play functions** which provide easy access to a desired selection.
- **Automatic recording level adjustment** for one-touch protection against distortion.
- **Timer-activated playback and recording** through the use of an optional timer.
- **Automatic switching between line and microphone input** when recording with a microphone.
- **Display mode button** which allows you to select normal display, counter only or display off.

For easier operation
- **Fade-in and Fade-out functions** to start and end recordings with a professional touch.
- **Easy-to-read digital linear counter** which shows the elapsed recording or playing time.

* Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.

"DOLBY", the double-D symbol □□ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

3

Precautions

On safety
- Operate the unit only on 120 V AC, 60Hz.
- Before operating the unit, be sure that the operating voltage of your unit is identical with that of your local power supply.
- Should any solid object or liquid fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it will not be used for a long time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.

On operation
- When the unit is not used, turn the power off to conserve energy and to extend the useful life of your unit.
- Because of a safety mechanism, the function buttons will not operate if the cassette holder is not completely closed, if there is no cassette in the cassette holder, or if a cassette has been incorrectly inserted into the cassette holder.

On head cleaning
The head and tape path should be cleaned after every ten hours of operation. Dirty heads and a dirty tape path may cause:
- loss of high-frequency response
- loss of sound volume
- sound drop-out

If you have any questions or problems concerning your unit, please contact your nearest Sony dealer.

For detailed safety precautions, see the leaflet "IMPORTANT SAFEGUARDS".

Installation

Notes on Installation

- Place the unit with the front panel facing you in a location with adequate air circulation to prevent overheating of the unit.
- Do not place the unit:
  - near heat sources such as radiators or air ducts.
  - in places subject to direct sunlight, excessive dust, mechanical vibration or shock.
  - in an inclined position.
  - on a rug or other soft surfaces that would block the ventilation holes on the bottom of the unit.
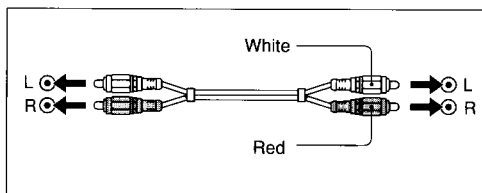
Do not throw away the carton and the packing material
They will come in handy when transporting the unit or shipping it for servicing.
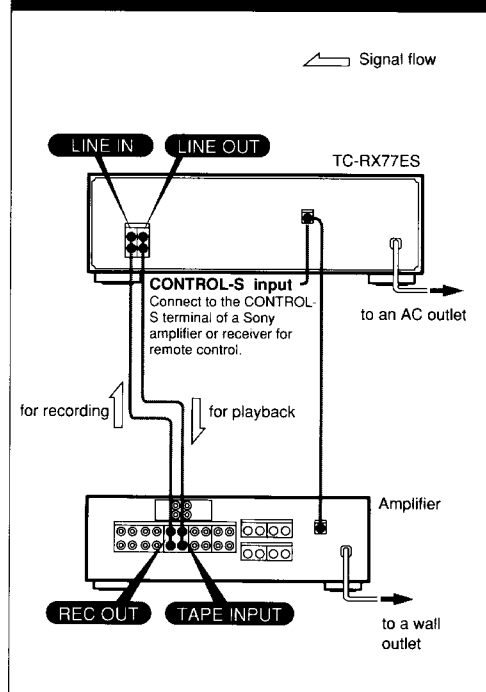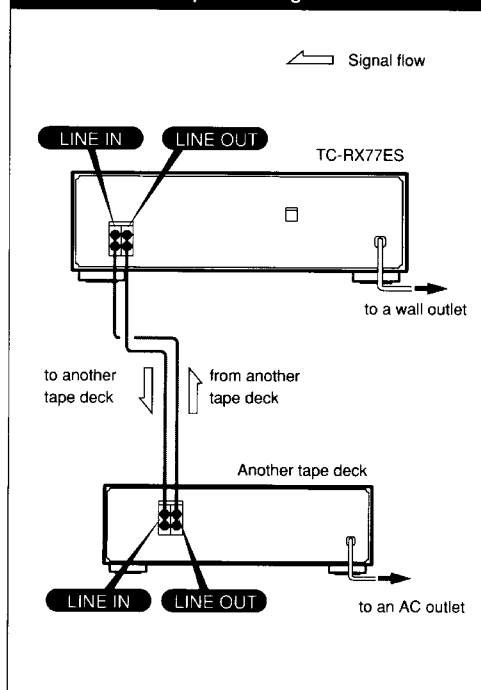
Connections

Notes on Connections

- Turn off the power to all equipment to be connected before making any connection.
- Note that the red plug of the supplied connecting cord is for right-channel (R) connection and the white plug for left-channel (L) connection.
- The connecting cords should be fully inserted into the jacks. A loose connection may cause hum pickup.


Basic Connection

Signal flow

LINE IN   LINE OUT

TC-RX77ES

CONTROL-S input
Connect to the CONTROL-S terminal of a Sony amplifier or receiver for remote control.

to an AC outlet

for recording   for playback

Amplifier

REC OUT   TAPE INPUT

to a wall outlet

Connection for Tape Dubbing

Signal flow

LINE IN   LINE OUT

TC-RX77ES

to a wall outlet

to another tape deck   from another tape deck

Another tape deck

LINE IN   LINE OUT

to an AC outlet

Note on the CONTROL-S input
To remote control this unit through a receiver or amplifier, connect the input on this unit to the CONTROL-S output on a Sony receiver or amplifier, with a CONTROL-S cable. When this connection is used, only remote commands sent through the receiver or amplifier will be executed. The remote sensor on this unit will not function.

*Remote control sensor
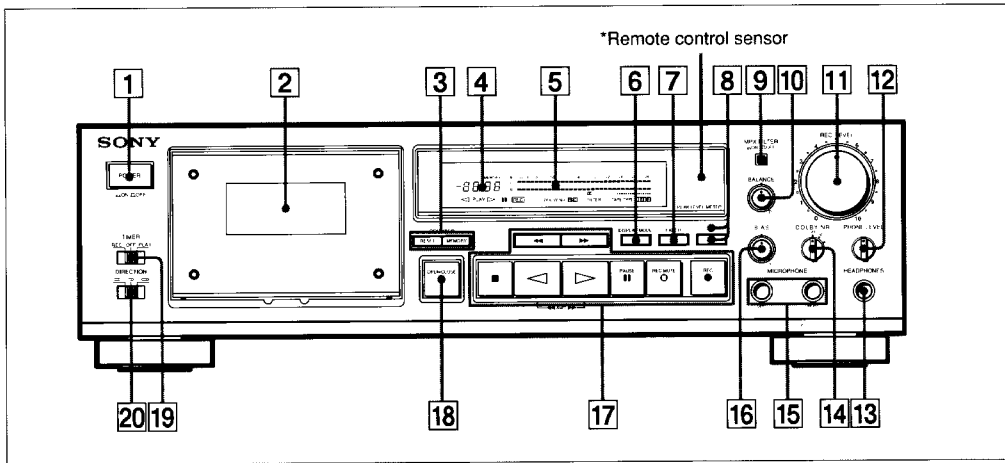
For details, refer to the page number indicated in ●.

[1] POWER switch

[2] Cassette holder

[3] Counter buttons
RESET button ❾
MEMORY button ❽ ❾

[4] LINEAR COUNTER ❾

[5] PEAK LEVEL METER ⑫

[6] DISPLAY MODE button ❼

[7] FADER button ⑪

[8] ARL (automatic recording level) control and indicator ⑩

[9] MPX FILTER button ⑫

[10] BALANCE control ⑩

[11] REC (recording) LEVEL control ⑩ ⑫

[12] PHONE (headphones) LEVEL control ❼

[13] HEADPHONES jack (stereo phone jack) ❼

[14] DOLBY NR (noise reduction switch) ❼ ⑩

[15] MICROPHONE jacks (phone jacks)

[16] BIAS control ⑬

[17] Tape operation buttons
◄◄ (leftward fast winding) button
►► (rightward fast winding) button
■ (stop) button
◄ (reverse play) button
► (forward play) button
II PAUSE (pause) button
O REC MUTE (record muting) button ⑭
● REC (record) button

[18] ≜ OPEN/CLOSE button

[19] TIMER switch ⑭
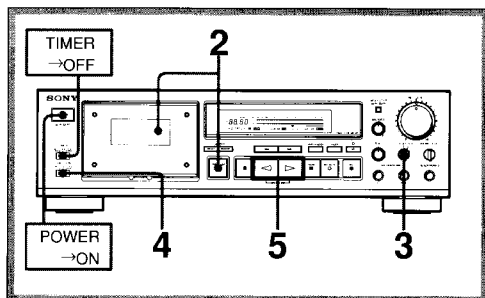
[20] DIRECTION mode switch ❼ ⑩

*Remote control sensor
You can remotely control this cassette deck with:
— A remote commander that came with a Sony amplifier or receiver if it has the 🔳 mark and cassette deck control capability.
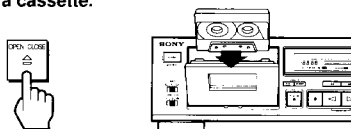— An optional Sony remote commander with the 🔳 mark and cassette deck control capability.

6

Follow the procedure below to play back a cassette.

1 Turn on the amplifier and select the tape function.

2 Insert a cassette.

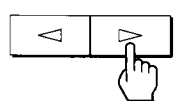**3** Set DOLBY NR to the same position that was used when the cassette was recorded.

4 Select the direction mode.

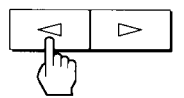| To playback one side | |
| To playback both sides | |
| To playback both sides continuously* | |

* After playing back five times, the deck automatically stops.

5

| From the front side | |
| From the reverse side | |

To stop playback, press the ■ button.
To stop playback momentarily, press the II button.
To restart playback, press the II , ◄ or ► button.
To fastwind a tape rightward, press the ►► button in stop mode.
To fastwind a tape leftward, press the ◄◄ button in stop mode.

Selecting the display mode
You may choose among three display modes by pressing the DISPLAY MODE button: (1) all indications are displayed; (2) only the counter is displayed; or (3)no display.

The TIMER switch must be set to OFF
Otherwise, recording or playback will start automatically when the power is turned on.

Is it necessary to set the tape type being used?
No. The deck has an automatic tape type detection system.

To start operations while the cassette holder is open
Operations may be started while the cassette holder is open. For example, when the ◄ or ► button is pressed while the cassette holder is open, the cassette holder will close and playback will start. Similarly, pressing the ◄◄ , ►► , or II buttons while the cassette holder is open will close the cassette holder and start the respective operation.

To change to recording mode during playback
Keeping the ◄ or ► button pressed, press the ● button. The unit immediately switches from playback to recording without stopping the tape. This is useful when editing previously recorded material.

For headphone listening
Connect the headphone plug to the HEADPHONES jack. The listening level can be controlled with the PHONE LEVEL control.

What is Dolby NR system?
The Dolby NR (noise reduction) system reduces tape hiss noise in low-level, high-frequency signals by boosting the signals during recording and lowering them during playback.
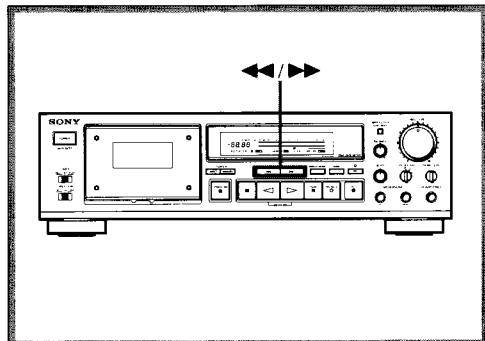
Note
The Dolby HX Pro system is effective only during recording, not during playback.

7

The AMS function detects the blank space between selections, allowing you to quickly locate the beginning of desired selections.

The Auto Play function automatically starts playing back a cassette after fast winding it to the beginning.

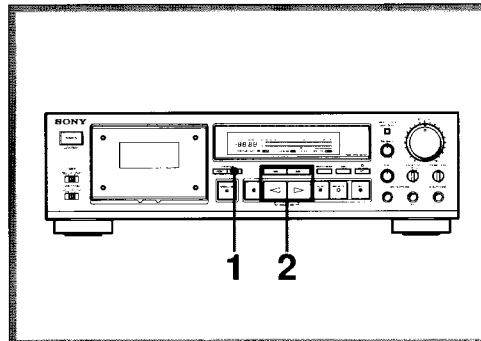**During playback, check the direction indicator and press ►► or ◄◄ referring to the following table.**

Direction Indicator	Desired selection	
	Next selection	Selection being played
PLAY ▷	►►	◄◄
◁ PLAY	◄◄	►►

The PLAY indicator flashes while the AMS searches for the beginning of the selection. After locating the beginning of the selection, playback will start automatically.
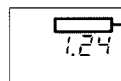

1

Make sure the MEMORY indicator is off. If it is not, press MEMORY.

2
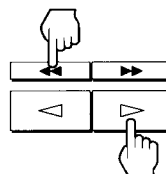
From the beginning of...	While pressing...
front side	►► , press ◄◄ .
reverse side	◄◄ , press ►► .

The AMS may skip a selection in the following cases:
• If the ►► (or ◄◄) button is pressed immediately before the following selection.
• If there is noise in the space between selections.
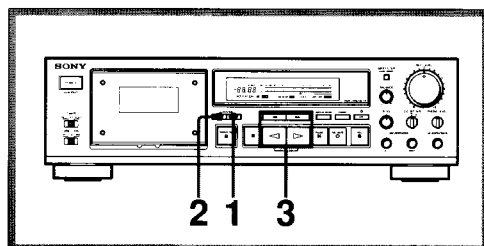• If the space is less than four seconds long.

The AMS will treat the following as blanks:
• a long pause in the music
• a passage of low frequencies or very low volume
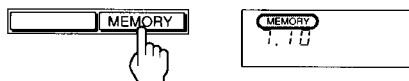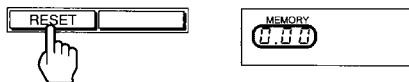• a gradual increase or decrease in volume

8

The Memory Play function allows you to use the counter to record a desired position on a cassette for fast relocation and automatic playback later.

1 Activate the Memory Play function.

2 At the desired position, reset the counter.

The desired position is memorized.

3 To return to the desired position
Check the direction indicator and press the respective buttons shown below.

Direction Indicator	While pressing...
PLAY ▷	▶, press ◀◀.
◁ PLAY	◀, press ▶▶.

Returning to the memorized position in stop mode — Memory Stop
If you press only the ◀◀ or ▶▶ button when the MEMORY indicator is on in the stop mode, the tape rewinds and the unit stops when the counter reaches 0.00.
Be sure to first stop playback before activating the Memory Stop function, otherwise the AMS function will activate.

To deactivate the Memory Play function
Press the MEMORY button, turning off the MEMORY indicator.

The Accuracy of the Digital Linear Counter

Since the counter is not a digital clock, the number will differ from the actual elapsed playback or recording time by a few minutes, depending on such factors as tape length and hub size.
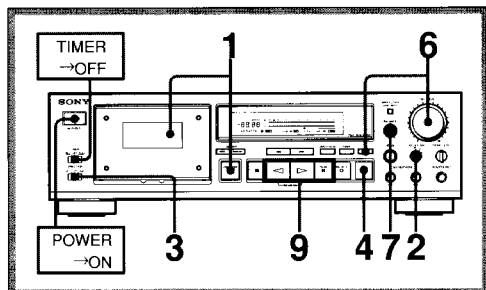
Note on Memory Play/Stop
In actuality, the tape is rewound to slightly short of 0.00.
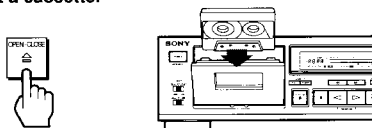
Do not turn off the power while using the counter
Turning the power off, then on again resets the counter to 0.00.

9

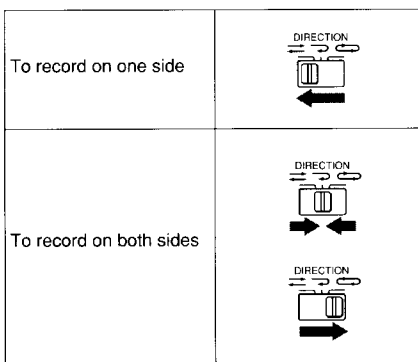Follow the procedure below to record a source on a cassette.

1 Insert a cassette.

2 Select the Dolby NR setting.

3 Select the side(s) to be recorded.

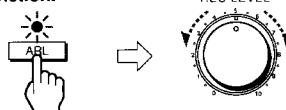|	DIRECTION
To record on one side	
To record on both sides	

4 Place the unit into recording pause mode.

5 Play the program source to be recorded.

6 Activate the Automatic Recording Level function.

For manual adjustment, see page 12.

- The REC LEVEL control automatically rotates to the proper recording level.
- The ARL indicator stops flashing when the level is set.

7 Adjust the balance.

8 Restart the program source, if required.

9 Start recording.

To record on the front side of the cassette	
When ▷ is on	Press ► once or II.
When ◁ is on	Press ► twice.
To record on the reverse side of the cassette	
When ◁ is on	Press ◄ once or II.
When ▷ is on	Press ◄ twice.

To stop recording
Press the ■ button.

To deactivate the Automatic Recording Level function
Press the ARL button (or turn the REC LEVEL control manually).

The TIMER switch must be set to OFF
Otherwise, recording or playback will start automatically when the power is turned on.

To start recording while the cassette holder is open
If you press the ● button while the cassette holder is open, the holder will close automatically and the unit will switch to recording pause mode. This function allows you to start recording at a moment's notice.

Note on step 4
A blinking indicator ◁ or ▷ indicates that recording is possible on that side.
If the cassette tab has been removed to prevent accidental erasure, the indicator will blink only for the side that can be recorded. If both tabs have been removed, there will be no response even when ● is pressed.

Checking the recording time on a tape
To check the remaining recording time on a tape:
1 Press the RESET button to reset the counter to 0.00.
2 Press ◄◄ or ►► to advance the tape to its end. The number on the counter shows the approximate recording time.
To check the total recording time of a tape, first rewind the tape to its beginning, then follow the same steps as above.
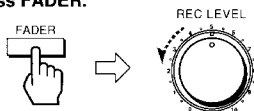
Starting a Recording with Fade-in

Ending a Recording with Fade-out

The Fade-in function starts a recording with a gradual increase in the recorded signal.

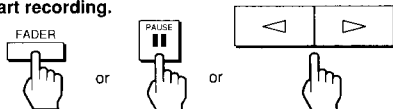The Fade-out function ends a recording with a gradual decrease in the recorded signal.

2

3
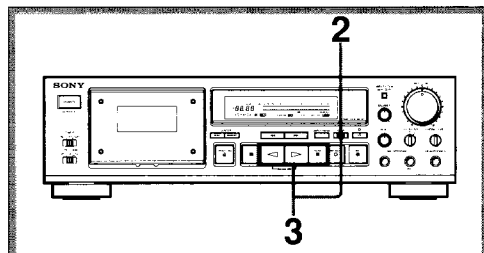
FADER

1 Perform steps 1 through 7 on page 10 to prepare for recording.
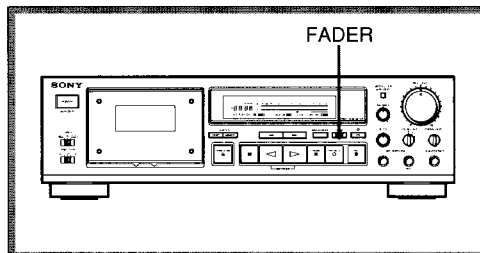
At the end of a recording, press FADER.

2 Press FADER.

The REC LEVEL control rotates downward.
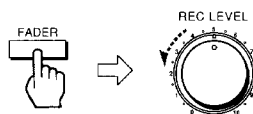
The REC LEVEL control rotates to zero to create a fade-out effect on the tape. After the REC LEVEL control reaches zero, the REC LEVEL control returns to its original position, and a four-second blank is created on the tape.

3 Start recording.

or

or

The REC LEVEL control rotates upward to produce a fade-in effect on the tape.

If the REC LEVEL control is preset to zero
There will be no fade-in or fade-out effect recorded on the tape.

If the REC LEVEL control is preset to ten
The REC LEVEL control may not return exactly to its original position after fade-in or fade-out recording is completed. However, the recording level will be equivalent to the original setting of ten.

11

Recording

Adjusting the Recording Level Manually

The Automatic Recording Level function may not be able to set the proper recording level in the following cases:
- When the source input contains noise, such as that caused by dust on a record, a record needle, or noise from a radio reception.
- During passages of low-volume sound, such as pianissimos in classical music. If later passages contain high-volume sound, the Automatic Recording Level function should be used to set the recording level for those passages.
- When proper adjustment is not possible due to the high-volume sound produced through the graphic equalizer.

In these cases, manual recording level adjustment is recommended.

The optimum recording level, which differs according to the tape type, is indicated on the PEAK LEVEL METER for each tape type.
Adjust the REC LEVEL control as high as possible without exceeding the recommended range for the tape type being used.

Recommended maximum PEAK LEVEL METER reading
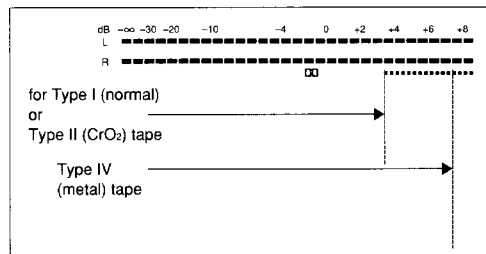
Tips on recording level adjustment
- If the recording level setting is too high, the recording will be distorted; if it is too low, the tape will produce a hissing sound. Therefore, the recording level should be set as high as possible without causing distortion.
- If the program source to be recorded has many high frequency signals, set the level to a relatively low position.

Recording FM Broadcasts with the Dolby NR System

When recording FM broadcasts with the DOLBY NR system, set the MPX FILTER button to ON (the "FILTER" indicator appears).
The MPX filter eliminates remnants of the 19-kHz stereo carrier and 38-kHz subcarrier signals which may impair the operation of the DOLBY NR system. Be sure that the Dolby NR switch is turned on since the MPX filter will not function otherwise. During recording with the Dolby NR system, use this switch only if the tuner is not equipped with its own MPX filter or the equipped filter does not function effectively.

Adjusting the Bias According to the Tape Type

To obtain the optimum frequency response, use the BIAS control to adjust the bias current according to the tape type being used. Reducing the bias boosts high frequencies but increases distortion. Increasing the bias decreases distortion but suppresses high frequencies. Balance the bias according to your listening preference.
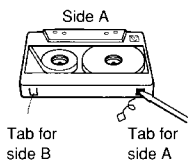
Bias reduced (high frequencies boosted)

Bias increased (high frequencies suppressed)

BIAS

Bias reduced (-)

Bias increased (+)
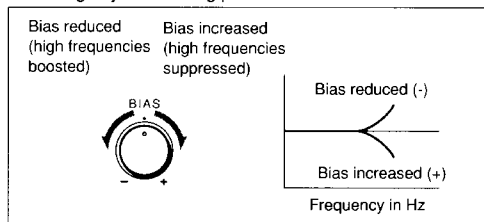
Frequency in Hz

Note
In the case of Type IV cassette tapes, the frequency change for any given bias setting will be minimal.

To Protect a Recording
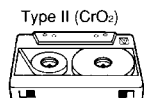
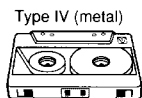| To protect a recording on side A or B	To recover a cassette for recording
Break out the respective tab.	Cover the respective slot with tape.

Side A

Tab for side B   Tab for side A

When using Type II (CrO₂) or Type IV (metal) cassettes
Be careful not to cover the detector slots which are necessary for automatic tape detection.

Type II (CrO₂)

Type IV (metal)

Detector slots
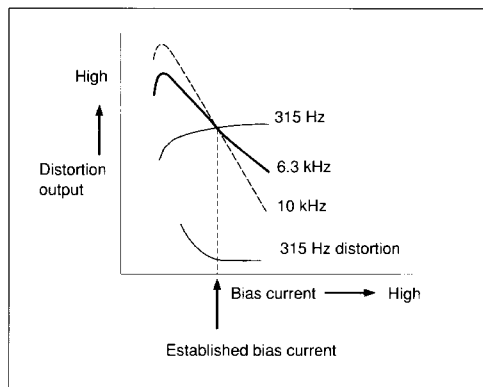
Detector slots

Cassette care
- Avoid touching the tape surface of a cassette to prevent contamination of the heads by dirt, dust, or oil on the skin.
- Keep cassettes away from equipment with magnets, such as speakers and amplifiers, as erasure or distortion on the recorded tape could occur.
- Do not expose cassettes to direct sunlight, extremely cold temperatures or moisture.

Note on cassettes longer than 90 minutes
The use of cassettes longer than 90 minutes is not recommended except for long continuous playback.

What is the Dolby HX PRO System?

The Dolby HX PRO system provides improved linearity in high-range frequency response during recording. Tapes recorded with this system retain the same high quality even when played back on other tape decks.

High

Distortion output

315 Hz

6.3 kHz

10 kHz

315 Hz distortion

Bias current ⟶ High

Established bias current

As shown above, characteristics such as output level and distortion differ widely according to the bias (high-frequency) current. In conventional systems, the bias current is susceptible to variations in certain recording signals (see diagram below) which may cause fluctuations in frequency response, distortion, or other unwanted characteristics.

High

Output

Fluctuation

Frequency ⟶ High
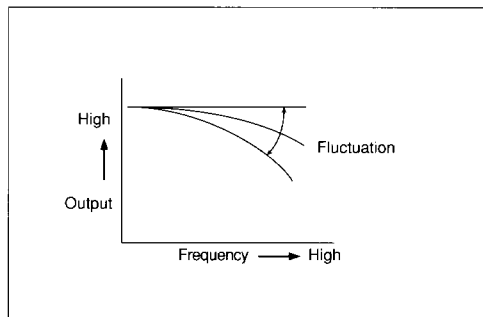
With the Dolby HX PRO system, the effective bias amount added to the bias current is controlled in millisecond units to greatly reduce distortion, improving linearity in high-range response and ensuring high-intensity recording with minimal distortion and noise.
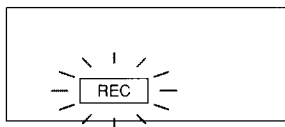
13

The Record Muting function allows you to insert a four-second blank to enable proper AMS operation (see page 9), and to replace unwanted input with a blank of any desired length.
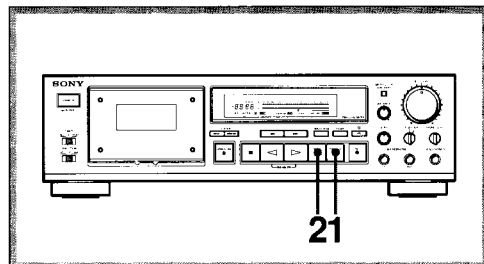
1 While recording, press O and release it immediately.

The REC indicator starts to blink. During this time, no incoming signals are recorded on the tape.
After four seconds, the ▮▮ indicator lights up and the unit enters recording pause mode.

2 Resume recording.

To create a blank longer than four seconds
Press the O button for the desired length of time. After four seconds, the REC indicator blinks with greater rapidity. When you release the O button , the ▮▮ indicator lights up and the unit goes into recording pause mode.
Press the ▮▮ button to resume recording.

By connecting an optional timer, recording or playback can be performed automatically at a preset time.
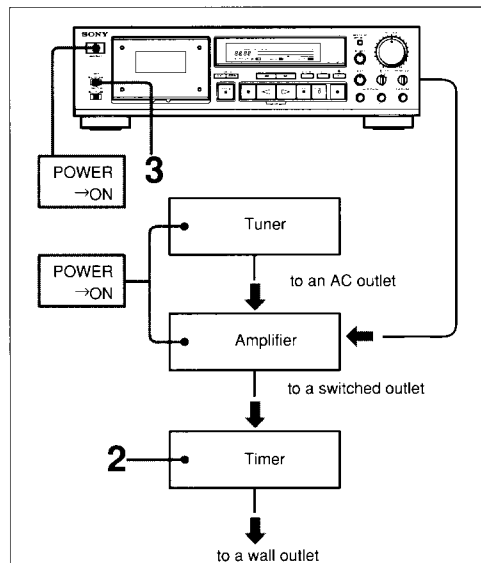
1 Prepare the unit for playback or recording.

| For playback | Follow steps 1 through 4 on page 7. |
| For recording | Follow steps 1 through 7 on page 10. |

Close the holder completely.

2 Set the timer to the desired time.
Power to the tape deck will be cut off.

3 Set the deck's TIMER switch to PLAY or REC.
Playback or recording will start at the preset time.

Keep the POWER switch on the unit on
When the timer is set, the power to the unit will be cut off. However, the POWER switch must be on to start timer-activated operation.

When the timer-activated operation is completed
Set the TIMER switch on the unit to OFF. If the TIMER switch is left at REC, the unit will automatically start recording the next time the power is turned on, and the previously recorded material may be erased.

Automatic recording level adjustment and fade-in during time-activated recording
When the REC LEVEL control is set to zero, the Automatic Recording Level function is automatically activated at the start of time-activated recording. If the optimum recording level is set, then fade-in will automatically be activated when time-activated recording begins.

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Maintenance

Cleaning the Heads and Tape Path

Clean all surfaces over which the tape travels after every ten hours of operation to guard against:
— low-quality sound
— a decrease in sound level
— excessive wow, flutter or drop-out
— incomplete erasure
— impairment of recording function

To obtain high-quality recorded sound, cleaning before every recording is recommended.

1 With the unit turned off, hold down the ▲ button and press the POWER button. This causes the holder to open, the heads to rise and the pinch roller to rotate.

2 Wipe the heads, the pinch rollers and the capstans with a cotton swab slightly moistened with alcohol or a commercially available cleaning fluid for tape decks. Clean the entire surface of each pinch roller and capstan while they are rotating, making sure that the cotton swab does not get caught in the mechanism. Press the ◄ or ► button to switch pinch rollers.

3 When completed, press the ▲ button again.
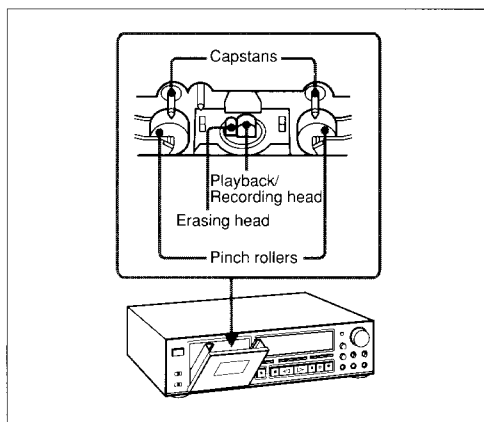
Do not insert a cassette until the cleaned areas are completely dry.

Demagnetizing the Heads

After 20 to 30 hours of use, or when you notice hiss and/or loss of high frequencies, the residual magnetism built up on the heads should be removed.

1 Turn off the power.

2 Demagnetize the heads with any commercially available demagnetizer.

Refer to the instruction manual of the demagnetizer for detailed instructions.

Cleaning the Cabinet

Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution.
Do not use any type of abrasive pad, scouring powder or solvents such as alcohol or benzine.

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Recording system	4-track 2-channel stereo	
Fast-winding time	Approx. 90 sec. (with Sony C-60 cassette)	
Bias	AC bias	
Heads	Erasing head × 1 (ferrite head) Playback/Recording head × 1 (LA head)	
Motors	Capstan motor × 1 (DC servo motor) Reel motor × 1 (DC motor) ASIST (mechanical drive) motor × 1 (DC motor)	

Signal-to-noise ratio (at peak level)

Dolby NR switch / Cassette	OFF	B-Type ON	C-Type ON
Type IV (Sony METAL-SLT)	59 dB	67 dB	74 dB
Type II (Sony UX-S)	58 dB	66 dB	73 dB
Type I (Sony HF-S)	56 dB	64 dB	71 dB

Total harmonic distortion
1% (with Sony METAL-SLT cassette)

Frequency response (DOLBY NR OFF)

Type IV cassette (Sony METAL-SLT)	20 - 20,000 Hz (±3 dB, IEC) 30 - 15,000 Hz [±3 dB 0VU (-4 dB) recording]
Type II cassette (Sony UX-S)	25 - 17,000 Hz (±3 dB, IEC)
Type I cassette (Sony HF-S)	25 - 16,000 Hz (±3 dB, IEC)

Wow and flutter   ±0.09% W. Peak (IEC)
0.06% WRMS (NAB)
±0.16% W. Peak (DIN)

Inputs

Line inputs (phono jacks)	Sensitivity	77.5 mV
	Input impedance	47 k ohms
Microphone inputs (phone jacks)	Sensitivity (For a low-impedance microphone)	0.25 mV

Outputs

Line outputs (phono jacks)	Rated output level	0.32 V at a load impedance of 47 k ohms
	Load impedance	Over 10 k ohms
Headphones (stereo phone jack)	Output level	0–1.25 mW at a load impedance of 32 ohms

General

Power requirements	120 V AC, 60 Hz
Power consumption	20 W
Dimensions	Approx. 430 × 123 × 300 mm (w/h/d) (17 × 4⅞ × 11⅞ inches) including projecting parts and controls
Weight	Approx. 4.7 kg (10 lbs 6 oz)

Supplied accessory
Audio connecting cords (2)

Design and specifications subject to change without notice.

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Troubleshooting Guide

The following trouble checks will help you correct the most common problems encountered with your tape deck.
Should any problems persist after you have made these checks, consult your nearest Sony dealer.
Before proceeding with these trouble checks, verify that:
• The power cord is firmly connected.
• Amplifier connections are firmly made.
• Heads, capstans and pinch rollers are clean.
• The amplifier controls and switches are set correctly.

Function buttons and tape transport problems

Symptom	Cause	Remedy
The function buttons do not activate.	The cassette is not properly inserted.	Insert cassette correctly.
	Button was pressed immediately after the power was turned on.	Wait until the ‖ indicator stops blinking.
Playback or recording begins when the power is turned on.	The TIMER switch is not set to OFF.	Set the TIMER switch to OFF.
The ● button does not activate.	There is no cassette in the holder.	Insert a cassette.
	A tab has been removed from the cassette.	Cover the slot with tape (page 13).
Automatic shut-off mechanism activates before the tape comes to its end.	The tape is slack.	Take up the tape slack.
	The cassette shell is deformed.	Use another cassette.
	The Memory Play function is activated.	Press the MEMORY button to deactivate the function.
Excessively loud tape transport noise during fast winding.	This noise is caused by the cassette and does not signify a mechanical problem.	—
The cassette holder will not close.	There has been a power failure or the power cord has been disconnected while the cassette holder is open.	Reconnect the power.
The ⏏ button does not function.	There has been a power failure or the power cord has been disconnected.	Reconnect the power.

Troubleshooting Guide

Recording and playback problems

Symptom	Cause	Remedy
Recording or playback cannot be made or there is a decrease in sound level.	The heads are either dirty or magnetized.	Clean or demagnetize the heads.
	Improper connection.	Make connections properly (page 5).
	Improper setting of the amplifier controls.	Set the amplifier controls to the appropriate positions.
Excessive wow, flutter or drop-out.	The head, capstan or pinch roller is dirty.	Clean in accordance with instructions (page 15).
Incomplete erasure.	The erasing head is dirty.	Clean the erasing head.
Increased noise or poor reproduction in high frequencies.	The head is magnetized.	Demagnetize the head.
Unbalanced tone in high frequencies.	Improper setting of the DOLBY NR switch.	During playing back, set the switch to the same position used in recording.
	The unit is placed near a television set.	Move the unit away from the television set.
The desired selection cannot be located even though you activate the AMS.	There is noise in the space between selections. The space is less than four seconds long.	Rerecord the tape if you can, and insert a blank space of four seconds using the ◯ button.
	The ►► (or ◄◄) button was pressed immediately before the beginning of the following selection.	—
Playback begins in the middle of the selection when the AMS is activated.	The selection contains one of the following: — a long pause in the music — a passage of low frequencies or very low volume — a gradual increase or decrease in volume.	While the tape is playing, press the ►► or ◄◄ button again.

Noise

Symptom	Cause	Remedy
Hum noise.	The unit is stacked on or under the amplifier.	Separate the unit.
Noise is recorded.	The recording was made near equipment such as a television set or a color monitor, and interference has affected the recording on the tape and the Dolby NR system.	Move the unit away from the television set or color monitor.